

Ethnic Greens Trial

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In December 2011, Jim Ochterski of Ontario County Cooperative Extension and I held an ethnic vegetable workshop in Canandaigua, NY. More than 40 farmers attended an all day workshop on the production and marketing of various types of vegetables representing a broad ethnic background. The range of what is available can be as tomatoes, peppers, and squash we are familiar with known by different names by varying cultural communities. Other types of vegetables are quite unique and exotic. As new ethnic groups move into the regions across the state, the marketplace opens up a bit wider to new and exciting vegetables to grow and sell.

The interest from the attendees in exploring growing ethnic vegetables was quite high coming out of the workshop. With a little funding from the Western NY CCE Association group, I launched a two year ethnic vegetable variety and marketing trial. The focus is to see how well assortments of vegetables that represent some different nationalities perform here in WNY under our wildly fluctuating weather conditions and also to see how growers can market these new vegetables, how customers respond to them at the market, and what is needed to reach targeted communities perhaps.

This first trial was held on Firefly Farm, Canandaigua, NY and grown and maintained by our gracious farmer cooperator Sharon Nagle. Sharon is an organic grower who sells fresh produce to chefs in the Finger Lakes area. For this season, the trial focused on greens, both Asian and Italian that might have appeal as restaurant menu ingredients. Plants were grown as transplants set out on Aug. 8. Spacing of the Asian greens were tight at about 3-4" within rows and 6-8" between rows. The Italian chicories and radicchio were space about 12".

Asian Greens:

Pung Pop is a group of mustards selected from an open genetic population of mustards as selected by FEDCO seeds. The crosses made behind the selections came primarily from Indian mustard varieties. The plants grew quickly with dark green leaves and red veined stems. The flavor was very strong and hot. Due to this flavor component, it was felt that it did not lend itself well for entre dishes but rather if picked small as "baby" leaves would add nice flair for salads. Fair to good tolerance to flea beetle. 40+ days to maturity

Toraziroh from FEDCO had large leaves, strong stem, and quick grower. It was slow to bolt even in the extreme heat experienced. The flavor was distinctively zesty and more of the atypical Asian flavor, not as pungent as other mustards. 45 days to maturity.

Maruba Santoh from FEDCO grew quickly and easily harvestable after 35 days. The shape and texture of the plant was reminiscent of Michihilli cabbage with the tall wide leaves with thick midribs. Leaves could be picked for salads or leaves with stems for stir fry, and even bolting stems with flower buds all good for recipes. Preferred cooler temps for longer leaf production. Did not stand up to heat as well as the others.

Yokatta Na is in the *Brassica rapa* family. Matures in 45 days and can be picked young for salad mix. Best grown in cooler temperatures early in the spring or later in the year making it an ideal candidate for extended season production. In our trial, this variety performed quite well. The plants grew quickly with nicely formed uniform leaf and stem production having a spoon-like shape. Texture is crunchy and mildly zesty.

Another gene pool trial entry from FEDCO was Pink Lettuce Mix. This was another *B. rapa* relative. The leaves are light green and oval on long petioles with hints of pink in the veins. Lighter pigmentation might be due to the heat. It was quick growing maturing between 40-45 days. The flavor and texture of the leaves was tasty and sweet making it a favorite with the chefs.

Moving to a few of the pac choi types, Mei Qing has been known for a while with an overall smaller size than the standard choi varieties. It grows 8-10" with wide dark green leaves and white thick petioles and that vase-shaped appearance. Matures in 45 days and can tolerate heat but prefers cooler temperatures. Good bolt tolerance and somewhat tolerant of flea beetles. This variety can be picked young or grown to full size. Johnny's Selected Seeds

Shiro is another JSS entry. It is a small pac choi with bright white midrib excellent for baby pickings. Does not stand up well to heat or can be held long in the field. Once it matures there is little time to waste in picking it before it bolts.

Red Choi is a mid-sized choi with purplish tinges 9-12" at 40-45 days of maturity. Probably would work best for fall with cooler weather accentuating the color more. Quick to bolt under stress and doesn't have much holding time in the field. JSS

Semposai is from FEDCO and is a cross between a Japanese mustard spinach and cabbage. This F1 is a fantastic grower with large grayish green leaves, thick mid ribs, and totally resembles collards or the Portuguese Tronchuda kales. The flavor has a mild collard taste but the leaves are softer yet crisp. This crop needs space and room to grow. Each plant produces a large harvest of greens.

As indicated above, the spacing of the greens was tight. Even under these conditions, the quality was good. Flea beetle pressure was less in the latter half of the season but still a nuisance. Some varieties stood up the pest pressure better than the others. The Pung Pop greens had the best flea beetle rating (1 out of 5) while Toraziroh had the worst (2.5 out of 5). The rest fell in between. Germination rates were high, there were no disease issues, and no problems with other pests. Due to the weather, water stress may have been a problem but the plants seem to have stood up pretty good despite some afternoon wilting episodes.

Chicory and Radicchio:

We trialed several of these gourmet greens native to Italy. Cicoria pan di Zucchero is a sugar loaf-type tall heading chicory. The seed company, Seeds From Italy carries a wide selection of these heading varieties. The heads look like tight Romaine lettuce with light green leaves and thick white petioles. The tight heads really firm up in the cooler weather. Chicory has a bitterer flavor than radicchio and is used in traditional Italian recipes and as a bitter herb in salad mixes. The flavor does mellow a bit as the

temperatures drop in the fall. Maturity runs 80-90 days. Sharon seeded the chicories in flats and then transplanted them out. This ensures less variability in germination if directed seeded and then more consistent maturity at harvest. Chicory and radicchio have few pests. Slugs in the fall but the biggest problem is deer. Keep deer out at all costs. Once they get a taste for these greens, they will go after them big time.

Cicoria Orchidea Rosea also known as Red Orchid is a beautiful colored round-headed chicory. It is earlier than most at 75 days. The red intensifies with cool temperatures. Easy to germinate and grow. Heads get to be 4-6" in diameter.

Fiero is a tall radicchio with that characteristic sugar-loaf shape. Bright red coloration and quick maturing at 65-68 days.

Radicchio di Chioggia is another easier to grow varieties. Works well in the fall but can be grown from transplants in the spring before the hot weather forces bolting. Red and white striped heads matures 75-80 days at 4-5" in size.

Virtus is JSS radicchio maturing in 65-70 days and is a tall heading type. Can tolerate heat but prefers cooler temperatures. Light green leaves with whitish green markings. In our trial, Virtus was the quickest to head up. The spacing for the radicchio and chicories is usually one foot within and between rows. Virtus can be grown a little tighter. The wide outer leaves of these varieties can act as shade to deter weeds from getting too bad after a few cultivations.

Sharon commented that she really was pleased with most of the varieties trialed and her chefs found that several fit nicely into their menus. When asked, Sharon stated that she would continue to grow at least three of the Asian greens and a couple of the chicories and radicchio. These would be a welcome addition to her offerings to chefs in the area.

Next season we are looking to expand our trial to include a few more greens including some from several other cultures. We will also look at peppers, vine crops, and beans. I would like to thank Sharon Nagle for her participation, careful attention to detail, and organizational skills that helped get this trial through a real crazy growing season. And thanks to our Cornell Vegetable Team's technician, Elizabeth Buck for taking great pictures and keeping track of the field notes. Pictures and the final report of the trial will be at the Cornell Vegetable Team's website <http://cvp.cce.cornell.edu/>.